



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D5611-1**Job Sheet 192535****Part No:** D5611-1**Job Qty:** 1 pcs**Part Name:** EC130 Skidtube**Part Weight:** 0 lbs**Status:** New**Priority:** Medium**Job Created:** 3/27/19**Job Tracking No:****Due Date:** 4/29/19**Created By:** Steven Hemmerich**Type:** Stock**Description:****Note:** TBD D5611 REV A IPP REV:A 18.06.20 NEW ISSUE DD VERF:JFS**Ship Via:****Bill of Materials****Job Routing**

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier	Sign-off
					Setup	Run		
					Hrs	Hrs	Workcenter / Supplier Lead Time	
100	Handfinish - 1 - Chemical	1 pcs	4/29/19		0.00	0.25	Handfinish - 1 - 1	BER19-03-28
							Handfinish - 1 - 2	
							Handfinish - 1 - 3	
							Handfinish - 1 - 4	
							Handfinish - 1 - 5	
							Handfinish - 1 - 6	
							Handfinish - 1 - 7	
							Handfinish - 1 - 8	
							Handfinish - 1 - 9	
							Handfinish - 1 - 10	
							Handfinish - 1 - 11	
							Handfinish - 1 - 12	
							Handfinish - 1 - 13	
							Handfinish - 1 - 14	
							Handfinish - 1 - 15	
							Handfinish - 1 - 16	
							Handfinish - 1 - 17	
							Handfinish - 1 - 18	
							Handfinish - 1 - 19	
							Handfinish - 1 - 20	
							Handfinish - 1 - 21	
							Handfinish - 1 - 22	
105	QC 5	1 pcs	4/29/19		0.00	0.00	QC 5 - 10	
							QC 5 - 12	
							QC 5 - 17	
							QC 5 - 18	
							QC 5 - 19	
							QC 5 - 22	
							QC 5 - 24	
							QC 5 - 3	
							QC 5 - 43	

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

**Container No:** S167521**Part:** D5611-1**Job No:** 192535**Serial No/Batch:** S167521**Revision:** A**Inspector:****Exp Date:****Instructions:****Date:** 06/18/19

Plex 3/27/19 9:38 AM dart.hemmerich.stever

					QC 5 - 49	
					QC 5 - 51	
					QC 5 - 58	
					QC 5 - 68	
					QC 5 - 9	PD 19-03-31
					QC 5 - 50	
					QC 5 - 30	
					QC 5 - 40	
110	Outsource - 23 - Tube Bending	1 pcs	4/29/19		PAR005-VU	3-6-19
120	Packaging 2-1 - Receive - B4B	1 pcs	4/29/19	0.00 0.00	Packaging 2 - 1 - B4B	
					Packaging 2 - 2 - B4B	
					Packaging 2 - 3 - B4B	
					Packaging 2 - 5 - B4B	
					Packaging 2 - 4 - B4B	JUN 18 2019
					Packaging 2 - 6 - B4B	
					Packaging 2 - 7 - B4B	
					Packaging 2 - 8 - B4B	
					Packaging 2 - 9 - B4B	
					Packaging 2 - 10 - B4B	
					Packaging 2 - 11 - B4B	
					Packaging 2 - 12 - B4B	
					Packaging 2 - 13 - B4B	
					Packaging 2 - 14 - B4B	
					Packaging 2 - 15 - B4B	
					Packaging 2 - 16 - B4B	
					Packaging 2 - 17 - B4B	
					Packaging 2 - 18 - B4B	
					Packaging 2 - 19 - B4B	
					Packaging 2 - 20 - B4B	
					Packaging 2 - 21 - B4B	
					Packaging 2 - 22 - B4B	
					Packaging 2 - 23 - B4B	
					Packaging 2 - 24 - B4B	
					Packaging 2 - 25 - B4B	
					Packaging 2 - 26 - B4B	
					Packaging 2 - 27 - B4B	
					Packaging 2 - 28 - B4B	
					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
130	QC 6	1 pcs	4/29/19	0.00 0.00	QC 6 - 9	
					QC 6 - 68	JUL 02 2019
					QC 6 - 61	9-89
140	Packaging 3-1 - Stock - B4B	1 pcs	4/29/19	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	

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				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	TW
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
150 QC 21 - FG				1 pcs	4/29/19
				0.00	0.00
				QC 21 - FG - 21	
				QC 21 - FG - 70	
				QC 21 - SA - 53	

JUL 03 2019

Part Op 100 - (Chemical Conversion Coat per QSI005 4.1), Alodine prior to sending the extrusion to an outside vendor.
 Descriptions: 105 - ***IDENTIFY SERIAL # BY USING A MARKER IN THE MIDDLE OF TUBE AT CONTAINER CREATION***
 INSPECT ALODINE AND MAKE SURE TUBE IS IDENTIFY WITH MARKER IN THE MIDDLE OF THE TUBE
 110 - Issue P/O: 43843 Manufacture D5611-1 as per dwg (Bend, Swag, Remove excess material after bending) **Ship extrusion D6031-120** ***INSPECTION REPORT REQUIRED FOR EACH TUBE. MUST BE TRACEABLE TO INDIVIDUAL SERIAL NUMBER*** **AS PER DWG NOTE 8, EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.*** Material release note is required
 120 - (Receive & Inspect for Damage & Mat'l Certs), Ensure material release note is attached
 130 - (QC6- All purchased or subcontracted products)
 140 - (Identify as per dwg & Stock Location: L6003)
 150 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D6031-120	Tube, Seamless	1 pcs (1 ea)	100-Handfinish - 1 - Chemical	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Handfinish - 1 - Chemical	D6031-120	1	23	0

Part Specifications

Specifications could not be found.

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DARI
AEROSPACE

1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
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Container No: S167521



Part: D5611-1

Job No: 192535

Serial No/Batch: S167521

Revision: A

Inspector:

Exp Date:

Instructions:

Date: 03/28/19



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO043043



Supplier: PAR005-VU
Parker Fabrication Inc
501 East Courtland
Morton, IL 61550-9043 USA
Phone: 309-266-8413
Fax: 309-266-7231

PO No: PO043043
PO Date: 4/1/19
Due Date: 5/16/19
Purchase Order
Revision:

Revision Date:
Ship-To Contact: Phone:

Revision

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Journey Freight
Pymt Terms: Net 30
Freight Terms: Prepaid

Special Comments: Ensure that parts are serialized in such a way as to easily match tube to its corresponding paper work.

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	192508	D5609-1	EC130 Fwd Crosstube Issue P/O: Manufacture D5609-1 as per dwg (Bend, Remove excess material after bending) **Ship extrusion D6029-120** ***INSPECTION REPORT REQUIRED FOR EACH TUBE. MUST BE TRACEABLE TO INDIVIDUAL SERIAL NUMBER**** ***AS PER DWG NOTE 9, EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.*** Material release note is required	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42

1X JUN 18 2019



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Hawkesbury, ON
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PURCHASE ORDER

PO043043



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
Line Item Note FWD X-TUBE 13 each at your location. Ensure that parts are serialized in such a way as to easily match tube to its corresponding paper work.											
	192507	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192506	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192505	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192504	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192502	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192499	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192492	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192491	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192490	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192489	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192488	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
	192486	1X	JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$269.42/pcs	\$269.42
Sub Total:							13	0	13		\$3,502.46



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PURCHASE ORDER

PO043043



Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
2	192510	D5611-1	EC130 Skidtube Issue P/O: Manufacture D5611-1 as per dwg (Bend,Swag, Remove excess material after bending) **Ship extrusion D6031-120** ***INSPECTION REPORT REQUIRED FOR EACH TUBE. MUST BE TRACEABLE TO INDIVIDUAL SERIAL NUMBER**** ***AS PER DWG NOTE 8, EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS.*** Material release note is required	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
Line Item Note SKID TUBE 7 each at your location, 7 in this shipment. Ensure that parts are serialized in such a way as to easily match tube to its corresponding paper work.											
	192525	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192526	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192527	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192528	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192529	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192530	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192535	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192536	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192531	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192532	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192533	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
	192534	1 X	JUN 18 2019	Firmed	-	5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69

1 X JUN 18 2019

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Tel (613) 632-5200

PURCHASE ORDER

PO043043



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
	192537		JUN 18 2019	Firmed		5/16/19	1 pcs	0 pcs	1 pcs	\$306.69/pcs	\$306.69
Sub Total:							14	0	14		\$4,293.66

Grand Total: \$7,796.12

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

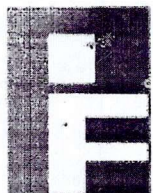
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 6/3/19 12:27 PM dart.Lussier.Patrick



Parker Fabrication, Inc.
501 East Courtland
Morton, IL 61550-9043

Ph: 309.266.8413
Fax: 309.266.7231

3 of 3

Pack List

Number: **123373**

Date: 10-Jun-19

To

Dart Aerospace
1270 Aberdeen St
Hawkesbury, ON K6A 1K7
Canada

Ship To

Steven Hemmerich
Dart Aerospace
1270 Aberdeen St
Hawkesbury, ON K6A 1K7
Canada

CPH: 1 613 632-5200

Ph: 1 613 632-5200

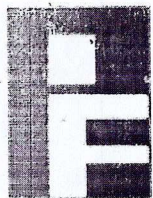
Terms		Ship Via	
Net 30		Freight Collect	
Quantity	Description		
13 ea	Part: D5609-1 EC130 Fwd Crosstube SO: 70913		Rev: A PO: PO043043 Line: 001
14 ea	Part: D5611-1 EC130 Skidtube SO: 70913		Rev: A PO: PO043043 Line: 002
Thank you for your business!			

RECEIVED
JUN 14 2019
DART AEROSPACE LTD.

RECEIVED

JUN 14 2019

DART AEROSPACE LTD.



Parker Fabrication, Inc.
501 East Courtland
Morton, IL 61550-9043

Ph: 309.266.8413
Fax: 309.266.7231

2 of 3

Pack List

Number: **123373**

Date: 10-Jun-19

To

Dart Aerospace
1270 Aberdeen St
Hawkesbury, ON K6A 1K7
Canada

Ship To

Steven Hemmerich
Dart Aerospace
1270 Aberdeen St
Hawkesbury, ON K6A 1K7
Canada

Ph: 1 613 632-5200

Ph: 1 613 632-5200

Terms		Ship Via	
Net 30		Freight Collect	
Quantity	Description		
13 ea	Part: D5609-1 EC130 Fwd Crosstube	Rev: A	
	SO: 70913	PO: PO043043	Line: 001
14 ea	Part: D5611-1 EC130 Skidtube	Rev: A	
7	SO: 70913	PO: PO043043	Line: 002
Thank you for your business!			
RECEIVED JUN 14 2019 DART AEROSPACE LTD.			



Certificate of Conformance (CoC)

Form F-4003
Page 1 of 1
Last Revised:
3/09/2018

Supplier Name: Parker Fabrication
Supplier Number: _____
Part Description: EC130 Skidtube

Part Number: D5611 ✓
Drawing Number: D5611 Revision: A

Purchase Order #: PO043043 ✓
Quantity: 14 ✓
Serial Number(s): _____ (if applicable)
Lot/Heat Number: _____ (if applicable)

All technical requirements of the contract are satisfied. Quality and performance are in accordance with the contract, the specifications, and all references and associated contractual drawings and documents.

I, as a supplier to Dart Aerospace, acknowledge and certify the material covered under this document is produced in accordance with the following:

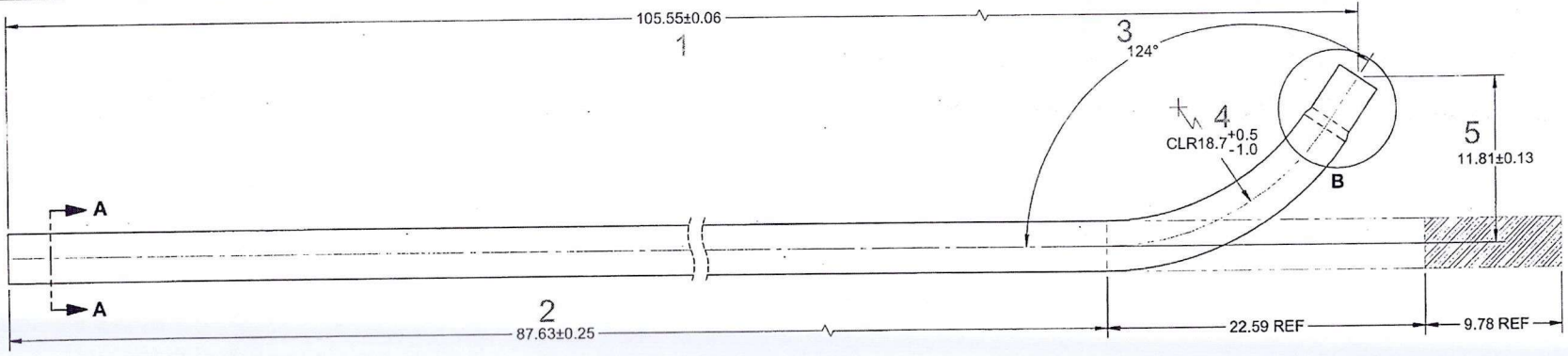
- ☒ All Contractual "Flow Down" Requirements
 - ☒ Supplier Standards Guide
 - ☒ Global Supplier Quality Manual
 - ☒ Product Conformance
 - ☒ Free of Counterfeit Material
- (Acknowledge by marking the boxes)

DAS
68
9-89

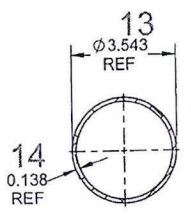
 Quality Manager 5/31/2019
Signature Title Completion Date

This certifies the parts/items/materials identified above conform to all applicable drawings and/or specifications as evidenced by reports or other documentation on file and all other purchase order and quality requirements have been met.

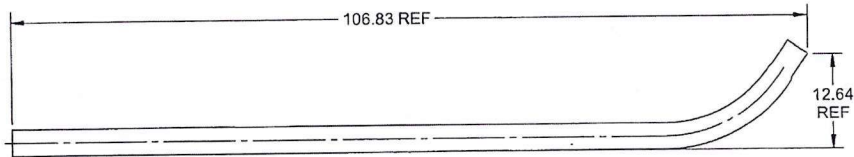
8 7 6 5 4 3 2 1



D5611-1 SKIDTUBE (EC130)



SECTION A-A
SCALE 2X

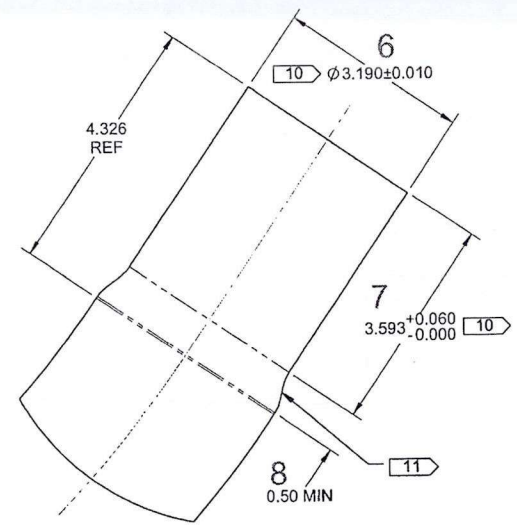


AUXILIARY VIEW
SCALE 0.5X

CONTROLLED COPY

RELEASED

2018 OCT 02
ECN 14-817



DETAIL B
SCALE 4X

NOTES:

- 1) MATERIAL: MAKE FROM D6031-120
STRAIGHT LENGTH = 120.00" (BEFORE BENDING / TRIMMING)
- 2) FINISH: CHEMICAL CONVERSION COAT EXTRUSION PER DART QSI 005 4.1 PRIOR TO SENDING EXTRUSION TO OUTSIDE VENDOR
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 16.40 lbs
- 8) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, WRINKLES, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 9) MAXIMUM TUBE FLATTENING DUE TO BENDING IS 2% BASED ON OD.
- 10) SWAGE 3.593+0.060/-0.000 LENGTH AT THE BENT END OF THE TUBE TO Ø3.190±0.010
- 11) SWAGED TRANSITION MUST BE SMOOTH, GRADUAL, AND WITHOUT VISIBLE DISCONTINUITIES

APPROVED

A NEW ISSUE		ZF	18.05.07
REV.	DESCRIPTION	BY	DATE
DESIGN	NO	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	ZF		
CHECKED	MW	DRAWING NO.	REV. A
MFG. APPR.	JFS	D5611	SHEET 1 OF 1
APPROVED	NO	TITLE	SCALE
DE APPR.	CP	SKIDTUBE (EC130)	NTS
DATE	18.05.07	COPYRIGHT © 2018 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

Production Part Approval Dimensional Test Results

[illegible]

Production Part Approval Dimensional Test Results

[illegible]

Production Part Approval Dimensional Test Results

[illegible]